



**U.S. DEPARTMENT OF ENERGY  
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY**

**TRIBAL ENERGY PROGRAM  
MANAGEMENT**



**Peer Review**

**January 13-14, 2004**

**Thomas Sacco**

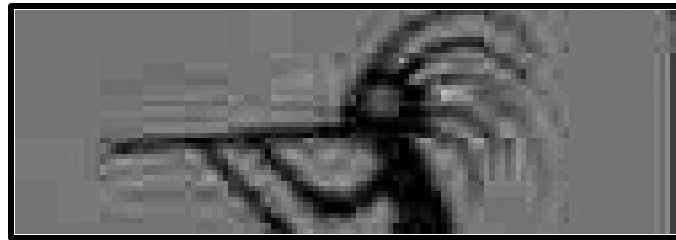
**DOE, Headquarters**



**DOE's Tribal Energy Program**

# **Tribal Energy Program**

Promote tribal energy self-sufficiency and economic development, and foster employment on tribal lands through the use of renewable energy



## **Authority**

Section 2606 of Title XXVI Energy Policy Act of 1992 (P.L. 102-486)



## DOE's Tribal Energy Program

# Tribal Energy Program Organization

Program Management through DOE Headquarters, implementation through the DOE Golden Field Office, and technical support through the DOE's Laboratories.

### Program Management

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**Thomas Sacco**  
Weatherization and Intergovernmental Program  
Office of Energy Efficiency and Renewable Energy (EERE)  
Department of Energy, HQ

### Field Implementation

DOE Golden Field Office  
Project Manager, Tribal Energy Program  
**Lizana Pierce**  
(303) 275-4727

### Technical Assistance

Sandia National Laboratories, Albuquerque  
**Sandra Begay-Campbell**  
(505) 844-5418

National Renewable Energy Laboratory  
**Roger Taylor**  
(303) 384-7389



**DOE's Tribal Energy Program**

# **Tribal Energy Program Organization**

## **Roles and Responsibilities**

### **Program Management (DOE, HQ)**

**Provides program planning, guidance, and resources**

- Provides programmatic direction
- Promote the Program
- Leverage other DOE Programs
- Facilitates coordination among other Federal agencies
- Provide technology transfer and information dissemination



**DOE's Tribal Energy Program**

# **Tribal Energy Program Organization**

## **Roles and Responsibilities**

### **Project Management (DOE, Golden Field Office)**

**Field implementation for administering and managing partnerships with Tribal Governments**

- Issue solicitations
- Manage resulting projects
- Promote the Program
- Leverage other DOE Programs
- Facilitates coordination among other field organizations
- Provide technology transfer and information dissemination



**DOE's Tribal Energy Program**

# **Tribal Energy Program Organization**

## **Roles and Responsibilities**

### **Technical Assistance (DOE Laboratories)**

**Act in a technical advisory capacity to the Program, projects and Golden Field Office**

- Technical advice
- Technical project support
- Assist in the review of applications
- Assist in monitoring projects
- Promote the Program
- Leverage other DOE Programs
- Provide technology transfer and information dissemination



DOE's Tribal Energy Program

# **Tribal Energy Program**

## **Program Management**

### **Program Reviews**

- Peer Review (2001)

### **Project Reviews**

- Annual Projects Reviews (2002, 2003)
- Bi-annual Project Status Meeting

### **Planning Sessions**

- Strategy Session (December 2001)
- Tribal Energy "Handbook" Workshop (December 2002)
- Roadmap Meeting (2003)

### **Program Planning and Coordination**

- Annual Operating Plans
- Bi-monthly Teleconferences



**DOE's Tribal Energy Program**  
**Tribal Energy Program**

**Assist Tribes Meet Their Energy Goals**

**Developing in Cooperation with Tribes**

- Peer Review (November 2001)
- DOE/Inter-tribal Energy Network (ITEN) Strategy Session (December 2001)
- DOE/ITEN Tribal Energy "Handbook" Workshop (December 2002)
- Collaborative activities with Tribal and Inter-Tribal Groups

**Supporting Government-to-Government Relations**

- Cooperative agreements between DOE and the Tribes





**DOE's Tribal Energy Program**

# **Tribal Energy Program**

## **Providing Financial Assistance**

### **Providing Funding Opportunities**

- Competitive Solicitations

### **Facilitating Government Cooperation and Leveraging Resources**

- Inter-Governmental Working Group (2002)
- Leverage other DOE Program resources



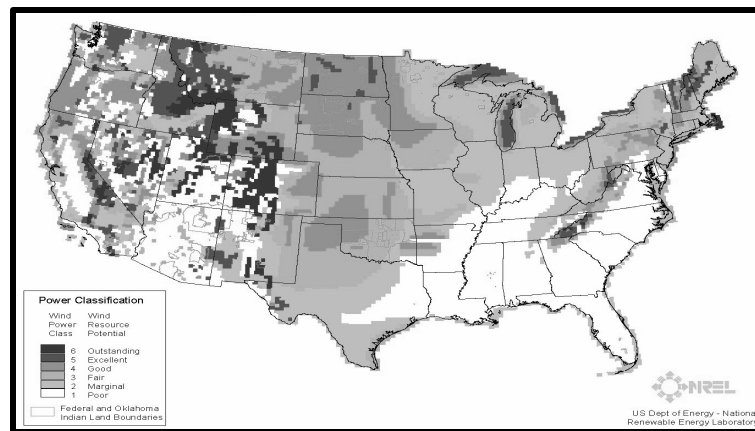
# DOE's Tribal Energy Program

## Tribal Energy Program

## Providing Technical Assistance

### Technical Assistance

- Technology Advice
- Models and Tools
- Resource Maps
- Strategic Planning
- Project Management Support





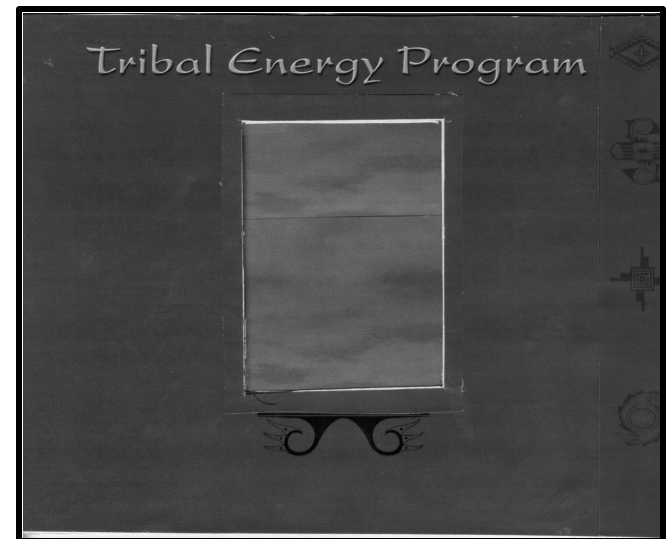
DOE's Tribal Energy Program

# Tribal Energy Program

## Providing Information and Education

### Information and Education

- Regional Workshops
- Program Brochure
- Conferences
- Tribal Energy Website
- Summer Internships
- Teach-the-Teacher Workshop
- Guide for Tribal Energy Development (Under development)





# **PEER REVIEW (November 2001)**

## **Peer Review Results**

- DOE's Primary Interface Needs to be with Tribal Leaders
- Focus on the Core Interests of the Tribe and Tribal Community as a Whole
- DOE and DOE Laboratories Need to be More Proactive
- Integrate DOE Native American Activities
- Inadequate Program Funding

## **Recommendations**

- Build on Tribal Wisdom in Future Planning
- Organize a Meeting Among Tribal Representatives

**Resulted in DOE/ITEN Strategy Session  
(December 2001)**



# **STRATEGIC PLANNING SESSION (2001)**

## **DOE PERSPECTIVE**

- Develop a program that supports Tribal energy self-sufficiency

## **STRATEGIC PLANNING SESSION**

- Seek Tribal wisdom for developing a long-term DOE program for renewable energy development on Native American lands

**Develop a DOE Indian Energy Program that supports the National Tribal Energy Vision**



# **STRATEGIC PLANNING SESSION (2001)**

## **Shared Vision for Tribal Renewable Energy by 2012**

### **Vision Focus**

- Sustainable Human Capacity through Empowerment & Education
- Integrated Communication & Technical Assistance Network
- Tribes Leading Renewable Industry At Home, Regionally & Worldwide
- Building & Restoring Tribal Economies Through Inter-Tribal Partnerships & Alliances
- Modeling Energy Efficiency Practices & Technology



# **STRATEGIC PLANNING SESSION (2001)**

## **Shared Vision for Tribal Renewable Energy by 2012**

### **Vision Focus (Continued)**

- Institutionalizing Tribal Planning & Management Capability
- Tribal Ownership & Regulation of Utilities
- Tribes Have Equal Standing In Renewable Energy Policy & Legislation
- Institutionalized Indian Program at DOE
- Trust Responsibility Commitment Through Contracts & Partnerships in Renewable Energy Development
- Full Participation In Energy Financing Markets



# **STRATEGIC PLANNING SESSION (2001)**

## **Shared Vision for Tribal Renewable Energy by 2012**

### **Issues & Obstacles to the Vision**

- Undeveloped Capacity & Unorganized Marketplace
- Competing Values & Interests
- Funding Indian Renewable Energy Development is Not Priority
- Unclear Direction on Implementing DOE Indian Energy Policy





# **STRATEGIC PLANNING SESSION (2001)**

## **Shared Vision for Tribal Renewable Energy by 2012**

### **Strategies to Meet Shared Vision**

- Leverage Existing Networks to Facilitate Inter-Tribal Experience Sharing
- Clearinghouse of Tribally Relevant Renewable Energy Information
- Develop Market Mechanisms For Tribal Renewable Energy\*
- Influencing & Facilitating Funding Opportunities
- Assure Visible Success in Tribal Renewable Energy Projects
- Coordinate Legislative Strategy to Meet Tribal Renewable Energy Needs\*
- Establish Teams to Develop Regional & Topical Strategic Plans
- Create Opportunities for Tribal Professional Development

\* Not Addressed



# **STRATEGIC PLANNING SESSION (2001)**

## **Leverage Existing Networks to Facilitate Inter-Tribal Experience Sharing**

- Conduct Regional Renewable Energy Road Show in Concert with ITEN
- Embrace and expand Native American Wind Energy Interest Group (NAWIG)
- DOE/NREL participate in Sustainable Conference

## **Accomplishments**

- Ten (10) regional workshops in collaboration with CERT & ITEN planned FY2004
- Quarterly NAWIG News newsletter issued Winter 2003 (WPA Activity)
- DOE/NREL/SNL participated in CERT Sustainability Conferences (March 2002, October 2002, April 2003, September 2003)
- Participated in twenty-seven (27) conferences and workshops (FY2002-FY2003)



# **STRATEGIC PLANNING SESSION (2001)**

## **Clearinghouse of Tribally Relevant Renewable Energy Information**

- DOE/NREL Web page
- Establish web-based Technical Assistance for Tribal Renewables
- Compile Case Studies and Planning Manual
- Assemble Success Stories, How-To's, Lessons Learned
- Formalize DOE/Laboratory Native American Network
- Capitalize on Positive Media Opportunities

## **Accomplishments**

- Tribal Energy Program Website Developed
- Web-based Guide to Tribal Energy Development (Under development)



# **STRATEGIC PLANNING SESSION (2001)**

## **Clearinghouse of Tribally Relevant Renewable Energy Information (Continued)**

### **Accomplishments**

- Assistant Secretary Garman Keynote Speaker at Sustainability Conference (April 2003)
- Assistant Secretary Garman Keynote Speaker at Southwest Renewable Energy Conference and Fair (August 2003)
- DOE news releases issued for awards and posted on Tribal Energy website
- U.S. Newswire carried DOE news release of awards
- Article published in Land Letter, a Natural Resource Weekly Report



# **STRATEGIC PLANNING SESSION (2001)**

## **Clearinghouse of Tribally Relevant Renewable Energy Information (Continued)**

### **Accomplishments**

- Solar Way magazine published
- Participated in twenty-seven (27) conferences and workshops (FY2002-FY2003)
- Article published in NW Energy Coalition Report
- Various local newspaper coverage of awards
- Laboratory network established and specific projects assigned



# **STRATEGIC PLANNING SESSION (2001)**

## **Influence and Facilitate Funding Opportunities**

- Resolve issues with RUS/USDA and ITEN Tribes
- Establish RUS set-aside for Tribes
- Leverage other Federal funding

## **Accomplishments**

- Established a Federal Working Group (2002)
- Continued coordination with Federal agencies (EPA, USDA, DOI, HUD, DOJ)
- Participated in four EPA and BIA Tribal conferences (FY2002-FY2003)
- Provided comments to RUS proposed policy change that resulted in the eligibility of renewable energy under RUS programs



# **STRATEGIC PLANNING SESSION (2001)**

## **Assure Visible Success in Tribal RE Projects**

- Complete the Navajo Electricity Project
- Commission Blackfoot, Rosebud, Fort Peck, and Alaska Wind Projects
- Develop Pueblo of Jemez project

## **Accomplishments**

- Navajo Electrification Projects Congressionally funded and on-going
- Provided technical assistance to Navajo Solar Project
- Rosebud Sioux turbine dedicated April 2003
- Pueblo of Jemez awarded funding for geothermal feasibility study FY2002



# **STRATEGIC PLANNING SESSION (2001)**

## **Assure Visible Success in Tribal RE Projects (Continued)**

### **Accomplishments**

- Commissioning planned for utility-scale turbines within 6-months at:
  - Fort Peck Community College
  - Turtle Mountain Community College
  - Fort Berthold Reservation





# **STRATEGIC PLANNING SESSION (2001)**

## **Create Opportunities for Tribal Professional Development**

- NREL/DOE hire a Native American as a liaison
- Utilize NTUA as model for young professionals
- DOE/NREL host interns

## **Accomplishments**

- Native American designated as DOE's Tribal Liaison
- Incorporated capacity building within "First Steps" solicitation (2003)
- Sponsored three interns at SNL (Summer 2003), who worked with the Navajo Tribal Utility to develop operation and maintenance plans



# **STRATEGIC PLANNING SESSION (2001)**

## **Create Opportunities for Tribal Professional Development (Continued)**

### **Accomplishments**

- Sponsored three interns (1 faculty and 2 students) at NREL (2001)
- Year-round Native American intern at SNL (2002-2003)



# **STRATEGIC PLANNING SESSION (2001)**

## **Establish Teams to Develop Regional & Topical Strategic Plans**

- Develop Energy Efficiency Audit Program
- Solidify alliances between Tribes, DOE, Laboratories and ITEN
- Comprehensive Renewable Energy Assessment of Tribal resources

## **Accomplishments**

- Collaborating with the DOE Weatherization Program for Tribal access to funding for efficiency measures
- Continued collaboration with Tribes, ITEN and CERT (participated in 11 tribal specific conferences and hosted 3 meetings/workshops)



# **STRATEGIC PLANNING SESSION (2001)**

## **Establish Teams to Develop Regional & Topical Strategic Plans (Continued)**

### **Accomplishments**

- Reservation specific resource mapping
- Generated Tribal College & University wind resource maps
- Incorporated resource options analysis and strategic planning within “First Steps” solicitation (2003)



# **STRATEGIC PLANNING SESSION (2001)**

## **Establish Teams to Develop Regional & Topical Strategic Plans**

- Begin development of the 2012 Indian Energy Road Map and implement research agenda

## **Accomplishments**

- On-going planning through Annual Operating Plans
- Tribal Energy Program Strategic Planning Session (December 2003)
- Ten (10) regional workshops planned (FY2004)



# **DOE's Tribal Energy Program Funding**

	<b>FY2002</b>	<b>FY2003</b>	<b>FY2004</b>
<b>Requested</b>	<b>\$2,100</b>	<b>\$8,307</b>	<b>\$6,000</b>
<b>Enacted</b>	<b>\$3,000</b>	<b>\$6,000*</b>	<b>\$5,000**</b>
<b>Discretionary</b>	<b>\$3,000</b>	<b>\$5,000</b>	<b>\$1,700</b>

\* Total of \$1,000,000 earmarked to the Council of Energy Resource Tribes (CERT)

\*\* Total of \$3,300,000 earmarked to CERT, ICOUP, and Pyramid Lake Paiute



# DOE's Tribal Energy Program Funding

FY 2002 TRIBAL ENERGY PROGRAM	
<b>“Renewable Energy Development on Tribal Lands” *</b>	<b>\$3,000,000</b>
(Solicitation No. DE-PS36-03GO92006) for:	
Feasibility studies and development projects	
<b>Technical Assistance**</b>	
NREL	<b>\$200,000</b>
Sandia	<b>\$100,000</b>
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	<b>\$3,300,000</b>
<i>* Includes carryover funds of \$300,000</i>	
<i>** Funded directly</i>	

**91% of DOE Funds Directly to Tribes**



# DOE's Tribal Energy Program Funding

FY 2003 TRIBAL ENERGY PROGRAM	
<b>“Renewable Energy Development on Tribal Lands”</b>	<b>\$1,950,000</b>
(Solicitation No. DEPS3603GO93002) for:	
Feasibility studies and development projects	
<b>“First Steps Toward Developing Renewable Energy and Energy Efficiency on Tribal Lands”</b>	<b>\$800,000</b>
(Solicitation No. DEPS3603GO93003) for:	
Strategic Energy Planning	
Energy Options Analysis	
Energy Organization Development	
Human Capacity Building	
<b>FY2002 selected projects funded in FY2003</b>	<b>\$1,440,000</b>
Feasibility Studies	
<b>Technical Assistance**</b>	
NREL	<b>\$350,000</b>
Sandia	<b>\$150,000</b>
<b>Council for Energy Resource Tribes – Earmark</b>	<b>\$961,000</b>
<b>Technology Transfer, Education, and Program Support</b>	<b>\$29,000</b>
Summer internships	*
Education and outreach at tribal events and conferences	*
Tribal conference support	*
Solicitation support	*
	<b>-----</b>
	<b>\$5,680,000</b>
<i>* Within available resources</i>	
<i>** Funded directly</i>	

**91% of DOE Funds Directly to Tribes**





# DOE's Tribal Energy Program Funding

ACTUAL FY 2003 TRIBAL ENERGY PROGRAM FUNDING			
	Planned	Planned	Actual
"Renewable Energy Development on Tribal Lands" (Solicitation No. DEPS3603GO93002) for:	\$1,950,000		
Selected feasibility studies		\$950,000	\$894,067
Selected development projects		\$1,000,000	\$1,226,905
"First Steps Toward Developing Renewable Energy and Energy Efficiency on Tribal Lands" (Solicitation No. DEPS3603GO93003) for:	\$800,000		
Selected projects		\$800,000	\$775,078
FY2002 selected projects funded in FY2003 Feasibility Studies	\$1,440,000	\$1,440,000	\$1,479,967
Technical Assistance**			
NREL	\$350,000	\$350,000	\$397,100
Sandia	\$150,000	\$150,000	\$150,000
Council for Energy Resource Tribes – Earmark	\$961,000	\$961,000	\$961,000
Technology Transfer, Education, and Program Support	\$29,000		
Summer internships	*	\$23,010	\$23,010
Education and outreach at tribal events and conferences	*	*	
Tribal conference support	*	*	
Solicitation support	*	\$5,990	\$12,384
<b>Available Funds</b>	<b>\$5,680,000</b>	<b>\$5,680,000</b>	<b>\$5,919,511</b>
<b>Carryover Funds</b>	<b>\$0</b>	<b>\$240,000</b>	
<b>Unspent Funds</b>			<b>\$489</b>
<b>TOTAL FUNDING</b>	<b>\$5,680,000</b>	<b>\$5,920,000</b>	<b>\$5,920,000</b>



# TRIBAL ENERGY PROGRAM

## ACCOMPLISHMENTS

- Ninety-one percent (91%) of DOE funding awarded to Tribes
- DOE funds of \$7.5 million leveraged by \$1.93 million (20%) in cost share
- Cost share exceeds minimum required by 630% (required \$306,700)



# DOE's Tribal Energy Program Funding

## PLANNED FY2004 ANNUAL OPERATING PLAN

<b>"Renewable Energy Development on Tribal Lands" Solicitation</b>	<b>\$1,340,000</b>
<b>"First Steps Toward Developing RE and EE on Tribal Lands" Solicitation</b>	<b>\$800,000</b>
<b>Regional Tribal Collaboration Solicitation**</b>	<b>\$0</b>
<b>FY2003 Selected Feasibility Studies</b>	<b>\$1,400,000</b>
<b>Tribal Education</b>	<b>\$100,000</b>
<b>Student Internships***</b>	<b>\$50,000</b>
<b>Tribal Energy Efficiency Initiative</b>	<b>\$200,000</b>
<b>Technical Assistance</b>	
NREL	<b>\$820,000</b>
Sandia	<b>\$150,000</b>
<b>Council for Energy Resource Tribes (CERT) – Earmark**</b>	<b>\$961,000</b>
<b>Meetings and Reviews***</b>	
FY2004 Peer Review	<b>\$25,000</b>
Project and Program Reviews	<b>\$25,000</b>
<b>Technology Transfer</b>	<b>\$29,000</b>
Education and outreach at tribal events and conferences	*
Tribal conference support	*
Solicitation support	*
<b>Program Reductions</b>	<b>\$100,000</b>
	<b>-----</b>
	<b>\$6,000,000</b>
<i>* Within available resources</i>	
<i>** Applied to FY2004 Regional Tribal Collaboration Solicitation, if not earmarked</i>	
<i>*** Funds included in NREL/SNL AOP</i>	



# DOE's Tribal Energy Program Funding

## FY2004 CONGRESSIONAL LANGUAGE

Under Intergovernmental Activities.- *The conference agreement includes \$5,000,000 for tribal energy activities, including*

- *\$1,000,000 for the Council of Renewable Energy Tribes,*
- *\$1,300,000 for the Intertribal Council on Utility Policy, and*
- *\$1,000,000 for the Pyramid Lake Paiute Tribe Renewable Energy Park.*

**Available Discretionary funds \$1,700,000**



# DOE's Tribal Energy Program Funding

REVISED FY2004 ANNUAL OPERATING PLAN	
<b>"Renewable Energy Development on Tribal Lands" Solicitation</b>	<b>\$0</b>
<b>"First Steps Toward Developing RE and EE on Tribal Lands" Solicitation</b>	<b>\$0</b>
<b>Regional Tribal Collaboration Solicitation</b>	<b>\$0</b>
<b>FY2003 Selected Feasibility Studies</b>	<b>\$900,000</b>
<b>Tribal Education</b>	<b>\$0</b>
<b>Student Internships</b>	<b>\$50,000</b>
<b>Tribal Energy Efficiency Initiative</b>	<b>\$0</b>
<b>Technical Assistance</b>	
NREL	<b>\$400,000</b>
Sandia	<b>\$150,000</b>
<b>Congressional Earmarks</b>	
Council for Energy Resource Tribes (CERT)	<b>\$1,000,000</b>
Intertribal Council on Utility Policy (ICOUP)	<b>\$1,300,000</b>
Pyramid Lake Paiute Tribe Renewable Energy Park	<b>\$1,000,000</b>
<b>Meetings and Reviews</b>	
FY2004 Peer Review	<b>\$0</b>
Project and Program Reviews	<b>\$0</b>
<b>Technology Transfer</b>	<b>\$0</b>
Education and outreach at tribal events and conferences	*
Tribal conference support	*
Solicitation support	*
<b>Program Reductions</b>	<b>\$200,000</b>
	<b>\$5,000,000</b>

**85% of DOE Funds Planned Directly to Tribes**



# FY2004 Planned Awards

FY2003 Selected Feasibility Studies						
#	Technology	Applicant Name	Project Title	DOE Costs	Cost Share	Total
<b>FEASIBILITY STUDY APPLICATIONS</b>						
1	Solar/Wind	Kenaitze Indian Tribe, IRA	Renewable Energy Resources Feasibility Study	\$40,354	\$3,824	\$44,178
2	Wind	Affiliated Tribes of the Fort Berthold Reservation	Three Affiliated Tribes Renewable Energy Feasibility Study	\$221,952	\$47,250	\$269,202
3	Biomass	Ak-Chin Indian Community	Ak-Chin Biomass Feasibility Study	\$97,036	\$0	\$97,036
4	Wind, Biomass, Solar, Wave	Quinault Indian Nation	Quinault Indian Nation Renewable Energy Feasibility Study	\$150,000	\$82,805	\$232,805
5	Wind	S & K Holding Company, Inc.	Flathead Renewable Energy Feasibility Study	\$202,788	\$47,250	\$250,038
6	Biomass	Yavapai-Apache Nation	Yavapai-Apache Forest Biomass Feasibility Study	\$126,897	\$0	\$126,897
7	PV, solar, hot water, hydronics	Mesa Grande Band of Mission Indians	Renewable Energy Feasibility Study for Mesa Grande Reservation	\$50,000	\$0	\$50,000
<b>TOTAL FEASIBILITY</b>				<b>\$889,027</b>	<b>\$181,129</b>	<b>\$1,070,156</b>